

ABSTRACT

The present invention provides a method and apparatus for establishing dedicated local area network (LAN) connectivity between network elements (NEs) in an optical transmission network without using any of the payload transport capacity available. In order to provision dedicated LAN connections between NEs, the invention reallocates existing overhead functionality to provide dedicated bandwidth for LAN communications between NEs. At each NE, a respective LAN interface unit provides access to this dedicated bandwidth and allows LAN devices such as personal computers (PCs), servers and monitoring equipment to communicate across NEs of an optical transmission network without consuming any payload transport capacity available therein.